

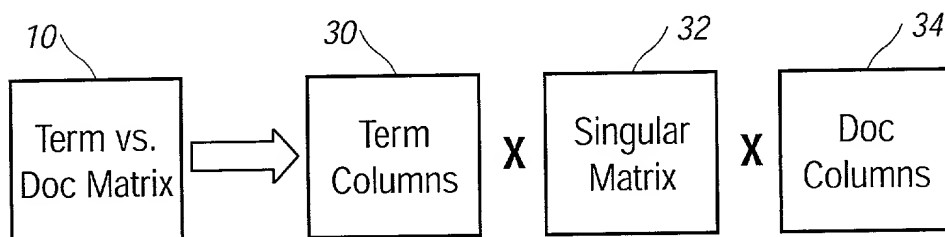
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	16	14	10		
	Doc #1	Doc #2	...	Doc #n	
12	able	1	0	...	1
	acid	0	2	...	0

	<term m>	1	0	...	1

Term by Document Matrix

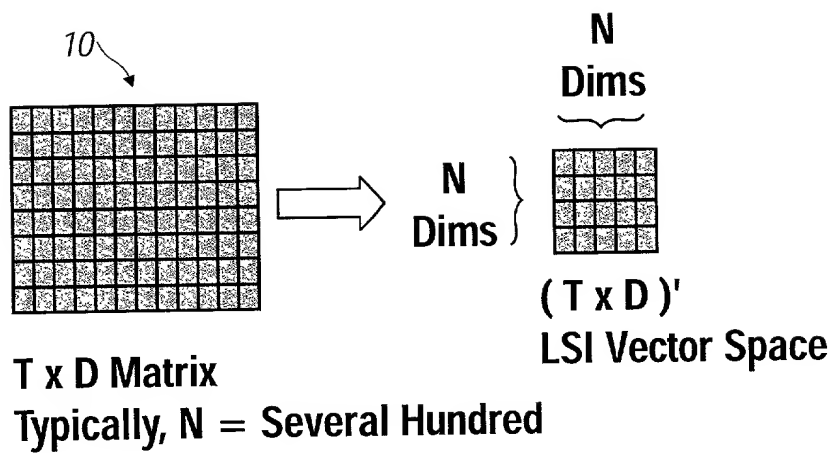
FIG. 1



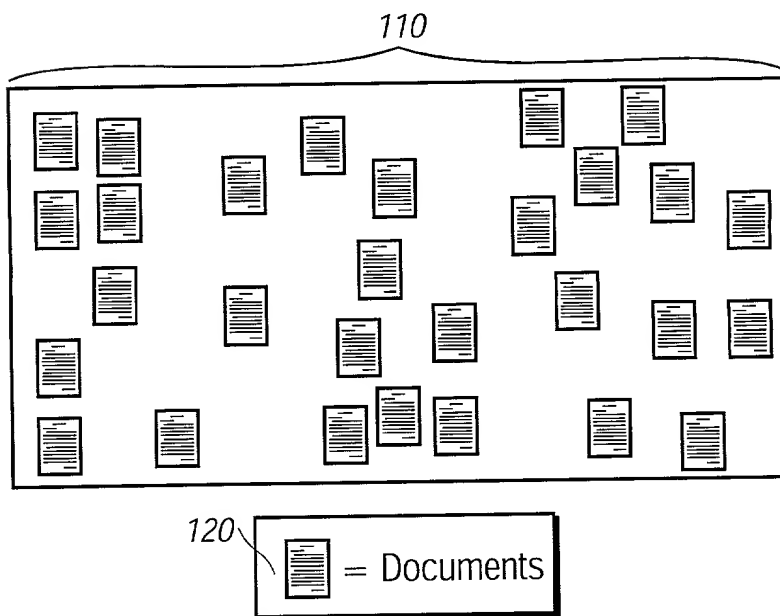
**SVD Extracts Key
Relationships among Terms -
Basis for Conceptual Matching**

Singular Value Decomposition (SVD) Operation

FIG. 2

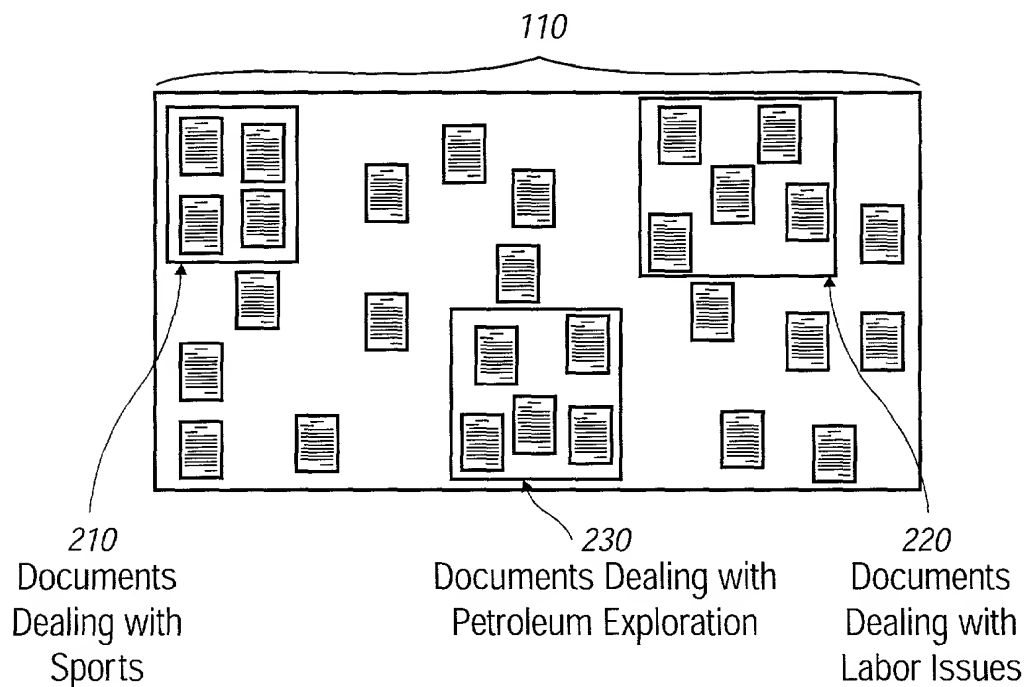


Dimensionality Reduction
FIG. 3



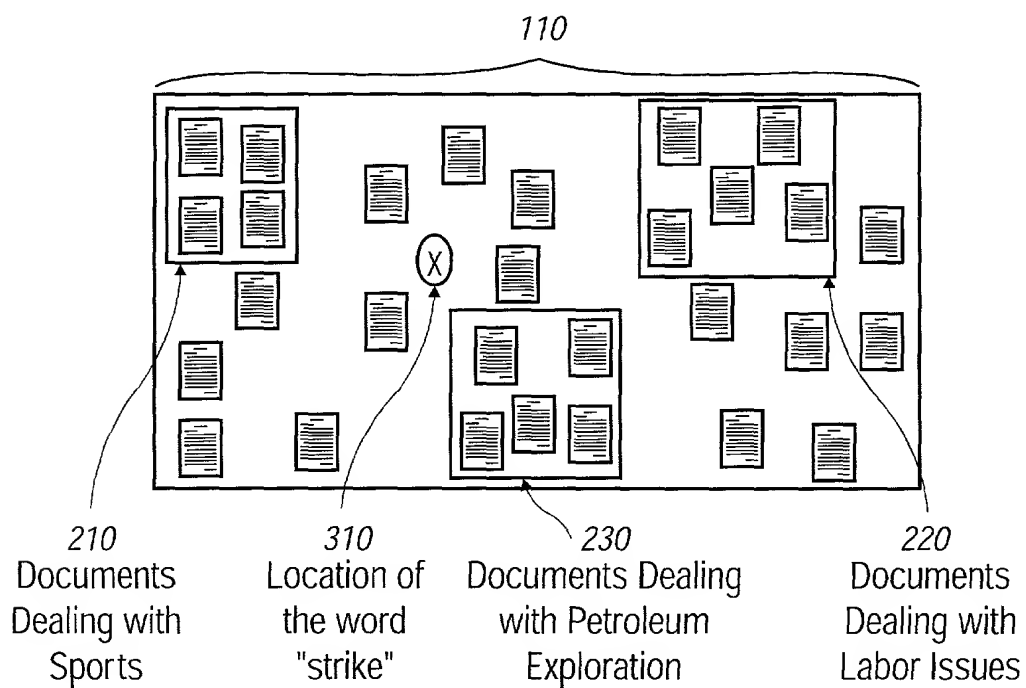
2-D Representation of LSI Space
FIG. 4

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Grouping of Documents by Topic in LSI Space

FIG. 5



Location of the Word *Strike* in the LSI Space

FIG. 6

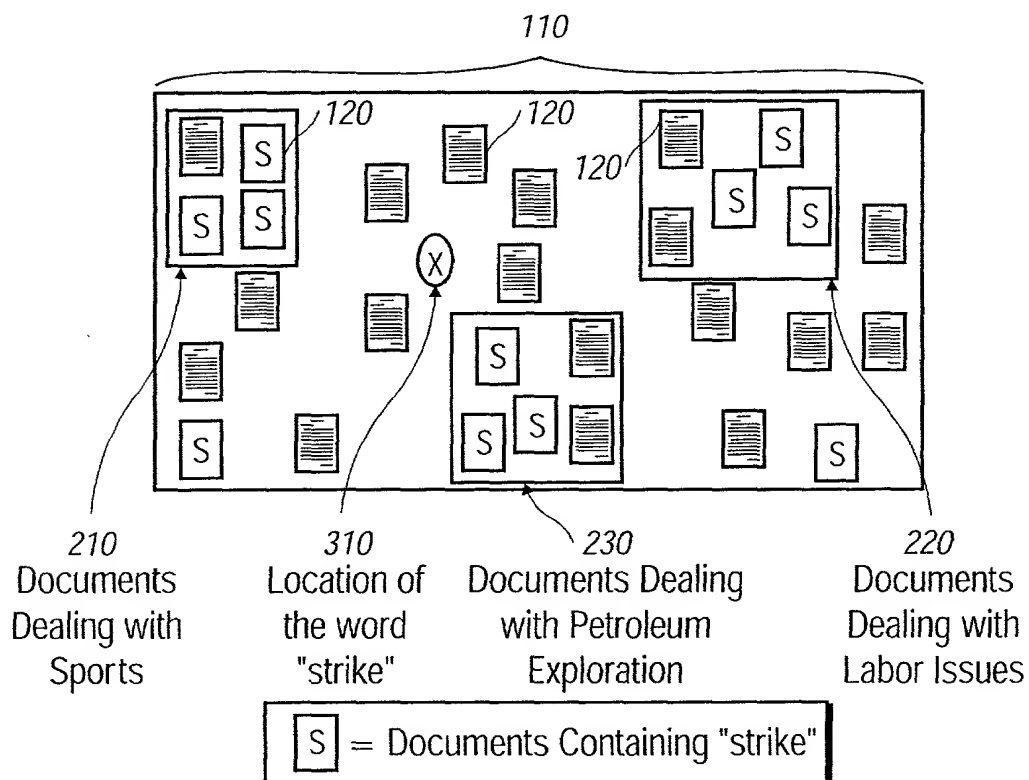
Distribution of Documents that Contain the Word *Strike*

FIG. 7

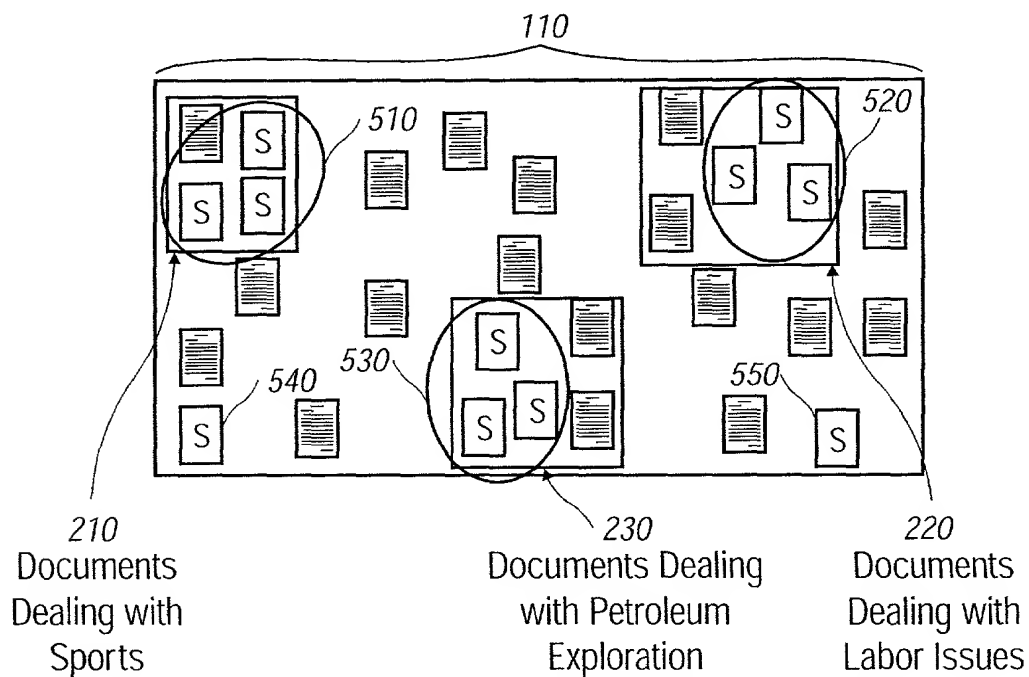
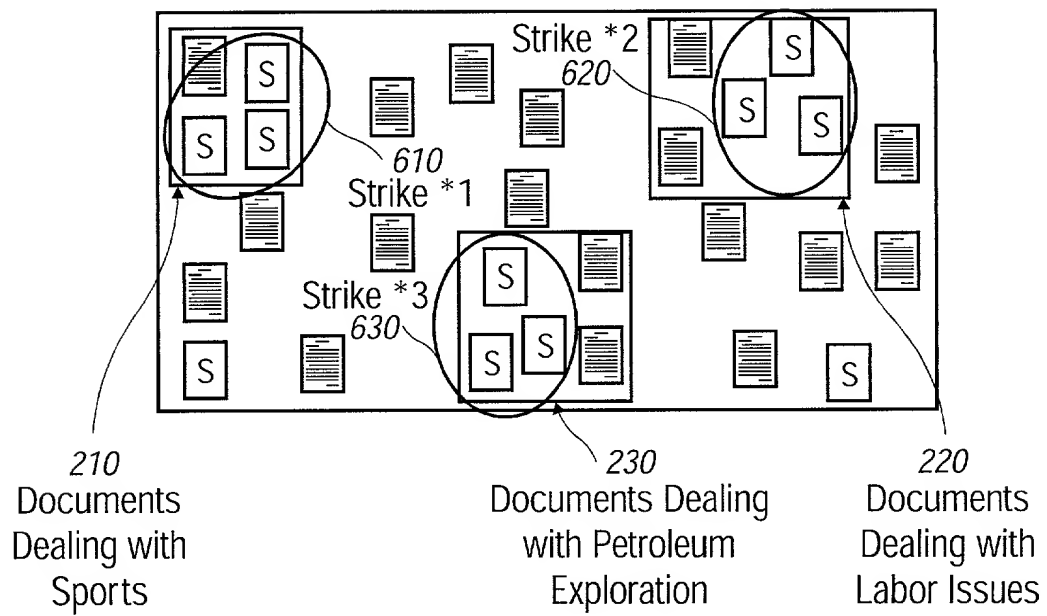
Clustering of Occurrences of the Word *Strike*

FIG. 8



Implicit Location of Derived Word Senses
FIG. 9